

IN THE CLAIMS

Claims 1-13. (Canceled).

Claim 14. (Currently Amended) A heat exchanger device, comprising:
at least one fin including means for blowing a fluid,
wherein the blowing means are uniform and include at least one wall of the fin,
wherein the at least one wall of the fin is formed by sintering a mixture of powdered
stainless steel, brass, and nickel,
wherein the mixture has a particle size smaller than 100 μm , and
wherein the at least one wall having has an open porosity of between 15 and 20%.

Claim 15. (Canceled).

Claim 16. (Previously Presented) The heat exchanger device as claimed in claim 14,
wherein the fin is of parallelepipedal overall shape and tubular cross section and has a
permeability measured with air at a pressure of 0.5 bar and at 0°C in a range from 300 to
1500 $\text{Sm}^3/\text{h}/\text{m}^2$.

Claim 17. (Previously Presented) The heat exchanger device as claimed in claim 16,
wherein permeability of the fin measured with air at a pressure of 0.5 bar and at 0°C is in a
range from 500 to 600 $\text{Sm}^3/\text{h}/\text{m}^2$.

Claim 18. (Previously Presented) The heat exchanger device as claimed in claim 14,
wherein a blowing fluid velocity field is symmetric across the at least one open porosity wall.

Claims 19-20. (Canceled).

Claim 21. (Currently Amended) The heat exchanger device as claimed in ~~claim 20~~ claim
14, wherein the open porosity is 17%.

Claim 22. (Withdrawn) The heat exchanger device as claimed in claim 14, wherein the at least one wall of the heat exchanger device is obtained by laminating a metal gauze.

Claim 23. (Withdrawn) The heat exchanger device as claimed in claim 22, wherein a lamination comprises at least one of 3 to 18 and 3 to 6 layers of metal gauze.

Claim 24. (Withdrawn) The heat exchanger device as claimed in claim 14, wherein the fluid is air at a pressure of at least one of between 0.1 and 6 bar and between 0.2 and 4 bar.

Claim 25. (Previously Presented) The heat exchanger device as claimed in claim 14, wherein the blowing fluid results from vaporization within the fin of a fluid that was initially in a liquid state.

Claim 26. (Previously Presented) The heat exchanger device as claimed in claim 14, further comprising an auxiliary cooling circuit.

Claim 27. (Previously Presented) The heat exchanger device as claimed in claim 14, wherein the fin is of parallelepipedal overall shape and tubular cross section and has a permeability measured with air at a pressure of 0.5 bar and at 0°C in a range from 300 to 800 $\text{Sm}^3/\text{h}/\text{m}^2$.

Claim 28. (Currently Amended) The heat exchanger device as claimed in ~~claim 19~~ claim 14, wherein the metal powder is based on a mixture of powdered stainless steel, brass and ~~nickel~~, with has a particle size within a range from 10 to 80 μm .